DOCUMENT RESUME

ED 321 548 FL 018 635

AUTHOR Olson, Shelley L.
TITLE Language Shift and Bilingual Education: A Long-Term Analysis of a National Sample of Mexican-American Sophomores.
PUB DATE Apr 90
NOTE 21p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 16-20, 1990).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Bilingual Education Programs; *English (Second Language; High Schools; High School Students; *Language Proficiency; Language Research; *Mexican Americans; Second Language Learning; *Spanish Speaking
IDENTIFIERS High School and Beyond (NCES); *Language Shift

ABSTRACT

The long-term pattern of language shift from Spanish to English for a national sample (N=428) of Mexican-American sophomores is documented. All students spoke Spanish as a first language and were educated entirely in the United States. The students were participants in diverse bilingual education programs during their elementary years and were selected from the High School and Beyond database. The proficiency level of the sophomores in both Spanish and English, and how often each language used, was analyzed to illustrate language shift. In addition, the study analyzed the specific situations in which each language was used. The results indicate a definite language shift. Sophomore students whose first language was Spanish and who had participated in bilingual education programs were highly proficient in English. English was often used in community and academic settings, while Spanish was frequently used in the home. (Author/JL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED321548

Language Shift and Bilingual Education: A Long-Term Analysis of a National Sample of Mexican-American Sophomores

Shelley L. Olson, Center Fellow
North Carolina Center for the Advancement of Teaching
Cullowhee, NC 28723

Abstract

This paper documents the long-term pattern of language shift from Spanish to English for a national sample (N=428) of Mexican-American sophomores. All students spoke Spanish as a first language and were educated entirely in the United States. The students were participants in diverse bilingual education programs during their elementary years and were selected from the High School and Beyond data base (Jones, et al., 1983).

The level of proficiency of the sophomore students in both Spanish and English and how often each language was used was analyzed to illustrate language shift. In addition, this study analyzes the specific situations (i.e. at home with parents, with classmates, in stores, etc.) in which each language was used.

The results show a definite language shift. Sophomore students whose first language was Spanish and who participated in bilingual education programs now speak English "very well" (6.0 mean on a composite scale where 4=very well... 16=not at all). English is often used in community and academic settings; Spanish is frequently used at home.

Paper presented at the American Educational Research Association Annual Meeting
April 16, 1990; Boston, MA.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

S. Olson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FL018635

BEST COPY AVAILABLE

The ongoing debate about the merits of bilingual education sometimes includes the notion that, in the long term, students in bilingual education programs do not learn English. President Reagan, in a departure from his prepared remarks to a group of mayors stated:

> It is absolutely wrong and against American concept to have a bilingual education program that is now openly, admittedly dedicated to preserving their native language and never getting them adequate in English so they can go out into the job market (*New York Times*, March 3, 1981).

Representatives from the National Association for Bilingual Education testified before the Senate Appropriations Committee on Labor, Health and Human Services, and Education, pointing out to the accomplishments of Title VII, bilingual education programs. They stated that the positive effects of these programs "include improved academic achievement test scores, reduced rates of school dropout and absenteeism, increased community involvement in education and enhanced self-esteem (*Youth Policy*, June 1983, p. 17). They further pointed out the value of the "natural linguistic resource" of limited English proficient students and stated that this might be used "as the foundation for a national program to expand the linguistic competencies of all Americans (*Youth Policy*, p. 19). U.S. English testified before a comparable committee in the House of Representatives that the American people have "serious misgivings" about bilingual education. They continued that "at the very least, bilingual education retards the acquisition of English language skills and the integration of students into the American mainstream" (Youth policy, p. 18). A federal study conducted in 1983 found that "in almost all cases, the goal of the special services was was to enable LEP (limited English proficient) students to function in an all-English classroom. Only a small proportion of the schools attempted to

maintain and enhance the students' proficiency in the native language" (National Clearinghouse for Bilingual Education 1985, p.3).

The history of bilingual education legislation during the decade of the 1980's reflects divisive attitudes and systematic clashing of opposing views on non-English usage in the classroom (San Miguel, Jr., 1988). This controversy underscores the need for an objective long-term assessment clarifying language competence and usage for a national sample of language minority students who have participated in bilingual education programs during their early years.

This study is based on information taken from the 1980 sophomore cohort of the High School and Beyond data base and focuses on Mexican-American students who spoke Spanish as a first language and participated in elementary level bilingual education programs during the late 1960's and early 1970's. The study focuses on the Spanish and English competence and usage patterns of these Mexican-American sophomores. Hence, all references will cite Spanish and English usage. Parallel studies may be performed on students of other language backgrounds.

Bilingual education is a heterogeneous invention; an experimental approach which has developed innovative ways of teaching language minority students (Hakuta, 1985). Students should attain good linguistic competence and mastery of subject content (Andersson and Boyer, 1978). Andersson suggests that four components may be part of a successful bilingual education program: English as a second language, reading and writing in Spanish, other subjects taught in Spanish and ancestral/cultural history. (A specific breakdown of the background variables of the 428 students used in this study and their particular elementary bilingual education program types, derived through hierarchical component analysis, may be found in Olson, 1989.)

Although evaluations of the academic achievement of students in bilingual education programs contain conflicting results, it may be safely concluded that bilingualism, per se, does not retard children's language development and has been shown to have positive

effects (Barklay, 1983; Cummins, 1981; Curiel, 1979; Lebya, 1978; Saldate, Mishra & Medina, 1985). Few systematic, national studies of bilingual education, long-term language competence and language shift been done to date.

Method

Data

In 1980, the National Center for Education Statistics sampled approximately 30,000 sophomores and 28,000 seniors in the United States, forming the base year data set of the High School and Beyond (HS&B) longitudinal study. Information used in this analysis was taken from the sophomore, 1980 cohort. High School and Beyond contains the most detailed information on language use and respondents' educational history available, in addition to complete transcript files and achievement data, making it well suited for the study of language shift in Mexican-American students who spoke Spanish as a first language. Extensive student background variables are included in HS&B. In addition, a detailed language file which provides information on language background factors and participation in elementary level bilingual education programs is available. Nielsen and Fernández (1981) attest to the usefulness and high quality of the language file. It is a source from which one can ascertain mother tongue, early educational experiences and patterns of language shift.

Sample

For this study, a sample of Mexican-American students who spoke *Spanish as a first language before entering school* was extracted from the HS&B data base. All selected students were educated entirely in the United States and participated in some form of early bilingual education. Long-term language shift from Spanish to English was assessed in

this population by looking at the current usage of Spanish by these students. Current English proficiency was also considered.

The HS&B data base provides information about (i) self-reported *language usage patterns* and (ii) *language proficiency* .

For language usage patterns the data consist of questions designed to measure current usage of Spanish with parents, with best friends, in school with other students, at work, and in stores.The exact format of the items used from the questionnaire are shown below.

18. **How often is that language spoken by the person underlined in each of the situations listed below? (MARK ONE OVAL FOR EACH LINE. IF YOU DO NOT LIVE WITH THE RELATIVE INDICATED OR DO NOT SEE THAT PERSON OFTEN, PLEASE MARK THE OVAL UNDER "Does not apply.")**

How often do (does):	Always or almost always	Mostly	About half the time	Some-times	Never	Does not apply
a. You speak that language to your mother	O	O	O	O	O	O
b. Your mother speak that language to you	O	O	O	O	O	O
c. You speak that language to your father	O	O	O	O	O	O
d. Your father speak that language to you	O	O	O	O	O	O
e. Your parents speak that language to each other	O	O	O	O	O	O
f. Other relatives (brothers, sisters, grandparents) speak that language around you	O	O	O	O	O	O
g. You speak that language with your best friends	O	O	O	O	O	O
h. You speak that language in school with other students	O	O	O	O	O	O
i. You speak that language in the stores you go to most often (i.e., grocery, record store, clothes store)	O	O	O	O	O	O
j. You speak that language at work	O	O	O	O	O	O
	01	02	03	04	05	06

Of the above questions, only those concerned with Spanish usage *by the student* are relevant for this study. The answers to these questions were coded on a five point scale: 1= Always or almost always (use Spanish), 2= Mostly, 3= About half the time, 4= Sometimes, 5 = Never.

English proficiency may be assessed from the answers to the following questions.

17. With regard to that language, how well do you do the following? (MARK ONE OVAL FOR EACH LINE)

How well do you . . .	Very Well	Pretty Well	Not Very Well	Not at All
a. Understand that language when people speak it	○	○	○	○
b. Speak that language	○	○	○	○
c. Read that language	○	○	○	○
d. Write that language	○	○	○	○
	1	2	3	4

---

19. How well do you do the following? (MARK ONE OVAL FOR EACH LINE)

	Very Well	Pretty Well	Not Very Well	Not at All
a. Understand spoken English	○	○	○	○
b. Speak English	○	○	○	○
c. Read English	○	○	○	○
d. Write English	○	○	○	○
	1	2	3	4

The answers to these questions were coded on a four point scale: 1= Very well, 2 = Pretty well, 3 = Not very well, 4 = Not at all.

In this national sample of Mexican American sophomores, data for a total of 428 students who spoke Spanish as their first language are available. This group of 428 students can further be divided into two groups: one consisting of 152 students who spoke

Spanish only before entering school and 276 students who spoke Spanish as their first language but also spoke *some English* before entering school.

Since all of the students selected for this study spoke Spanish as their first language before entering school, data on the amount of Spanish used by students in their sophomore year enables us to assess the long term shift in language. Thus, Spanish usage at two points in time could be compared. On a five point scale (described above) in which the earliest language production was assessed at 1 (1= Always use Spanish), students could be compared with the level of Spanish used in the sophomore year. Current English proficiency was similarly assessed.

In addition, a standardized written test of English proficiency, developed by HS&B, was administered to all students. The results of these tests provide an objective assessment of the student's current English proficiency.

Preparation of Data Sets

During the spring of 1980, the National Center for Education Statistics sampled approximately 30,000 sophomores and 28,000 seniors in the United States, forming the base year set of the High School and Beyond data base. The HS&B data base contains the most detailed information on language use and respondents' educational history currently available and may be used by researchers on request.

HS&B contains two data files, a general information data file and a language data file. The general information data file contains data such as student ID, race, test scores from standardized English proficiency and mathematical skills tests and the other information. The language data file contains extensive information on language usage, bilingual education and other related items. Data on Mexican-American sophomores was selected from the general information file and merged with the data from the language file. The resulting data was then separated into two sets: one for students who only spoke only

Spanish before entering school and for a second set for those who spoke Spanish as a first language and some English. A flowchart shown in figure 1 and the caption summarize the number of cases at each stage and the selection criteria. Statistics for the relevant variables are compiled and analyzed.

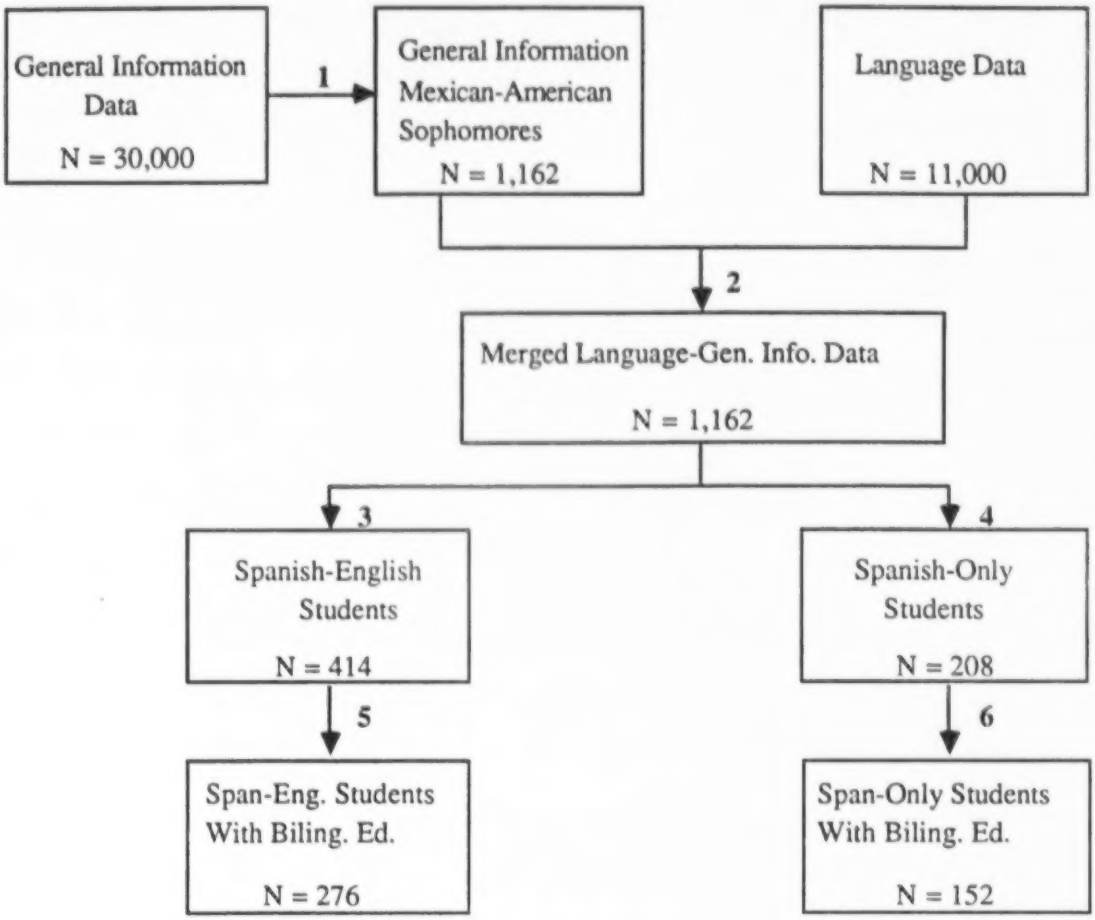


FIGURE 1. *Flowchart for the preparation of Spanish-English and Spanish-Only data sets*. The four stages are numbered. Stage **1**: Selection of Mexican-American sophomores, (HS&B coding of variables: RACE=1, BB090=1, GRADE=1, LANGDATA=1 and TESTDATA=1.) Stage **2**: Merging general information and language data by ID. Stage **3** : Selection of Spanish-English group (Language file coding of variables: LB11=2 and LB12=2.) Stage **4** : Selection of Spanish-only group (LB11=2 and LB12=1.) New composite variables are defined in stages **3** and **4**. In stages **5** and **6** the students with bilingual education are selected.

Results

The results of this analysis are shown in figures 2 and 3. During the preschool years, all of the subjects spoke Spanish as a first language. Of a total of 428 students, 152 spoke *only* Spanish before entering school. The remaining 276 students spoke Spanish as a first language and some English before entering school. Their current, self-reported, English and Spanish proficiencies follow. Independent ratings, (on a scale 1 through 4, 1= very well, ... 4= not at all) in the categories "understanding", "speaking", "reading" and "writing" in English are added to form the composite variable "English proficiency" (ENGPROF). Thus, ENGPROF is on a scale from 4 through 16. At the time of this writing, only the composite variable is available for analysis. The composite variable "Spanish proficiency" (SPANPROF) contains the same four underlying variables and is treated similarly.

As shown in figure 2 (a), for the students who spoke *only Spanish* before entering school, we see that the mean of self-reported, current Spanish proficiency stands at a 7.1 (N= 146, SD= 2.2) on a twelve-point, composite scale where 4= very well, 8= pretty well, 12= not very well and 16= not at all. On the same 16-point scale, current self-reported English proficiency for these students stands at 6.7 (N= 150, SD=2.4), falling between the "very well" and "pretty well" categories (figure 2 (b)). The average values for both English and Spanish are reported to be between the highest levels, "Pretty well" and "Very well". Current English proficiency is slightly above current Spanish proficiency, although this difference is not significant at the .05 level.

As can be seen in figure 2 (c), the mean, current Spanish proficiency score for students who spoke Spanish as a first language and some English before entering school is 8.0 (N= 262, SD=2.3), directly on the "pretty well" point. The English proficiency (figure 2 (d)) falls at 5.6 (N= 270, SD= 1.8) . This falls above the midpoint between the "very well" and "pretty well" categories on a 16-point scale, described above. English

proficiency is significantly better (.001 level) than Spanish proficiency. Moreover, English scores tend toward the highest proficiency category.

From the above, it is apparent that sophomore students who spoke Spanish as a first language and participated in elementary level bilingual education programs report that their current English proficiency is as good or better than their current proficiency in Spanish. Rather than demonstrating a lack of knowledge of English, these students demonstrate bilingual competence, with slightly better English proficiency than Spanish proficiency.

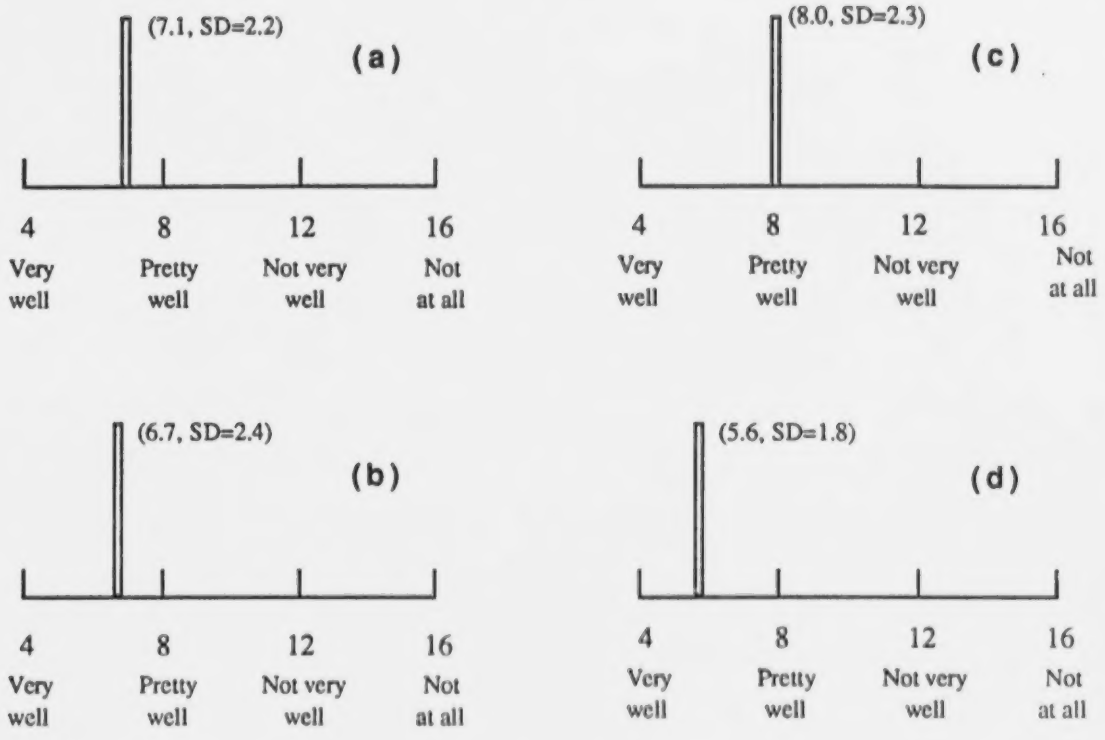


FIGURE 2. *Current, self-reported language proficiencies in Spanish and English for Mexican-American, sophomore students.* The composite score of four components, understanding spoken language, speaking, reading and writing is shown. Figure (a) shows the current Spanish proficiency of students who spoke *only* Spanish before entering school; figure (b) shows the level of English proficiency for the same group.

Figures (c) and (d) show current Spanish and English proficiency, respectively, of students who spoke Spanish as their first language and some English before entering school.

Language Shift from Spanish to English

All 428 Mexican-American students spoke Spanish as a first language. Initially, no English was used. Hence, in observing this early time point, a comparison can be made with Spanish and English usage patterns for these students during their sophomore year of high school. In this way, language shift may be observed.

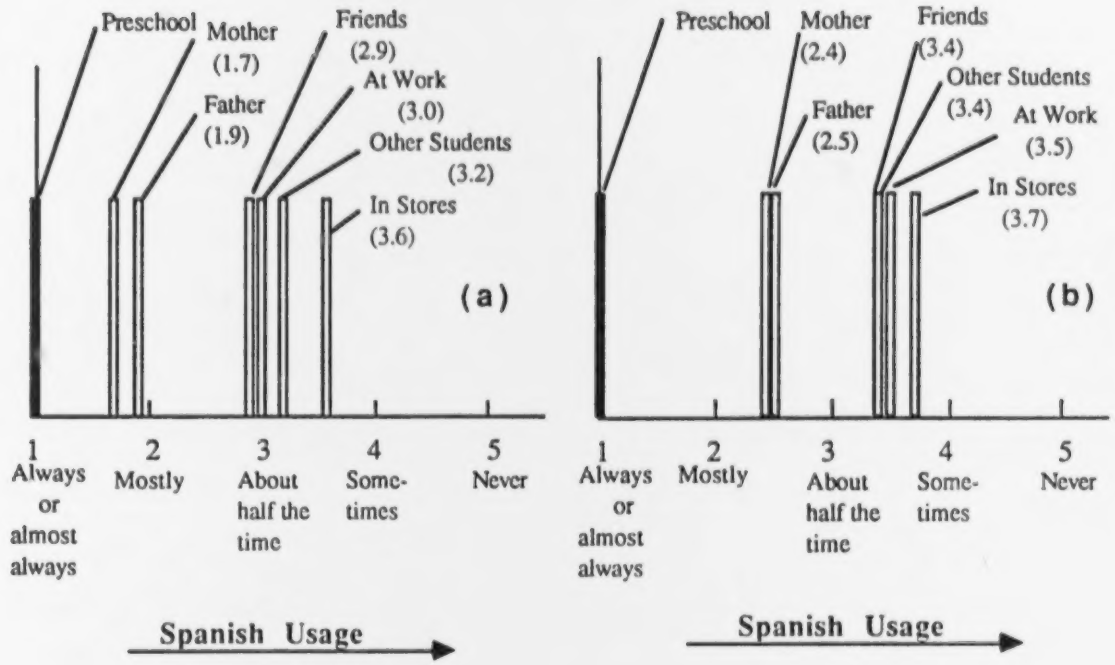
While figure 2 indicates Spanish *proficiency* patterns, figure 3 reports Spanish *usage* patterns; that is, how often is Spanish actually used and with whom or in which circumstances.

For the sophomore students who spoke *only* Spanish before entering school (N=152) and participated in bilingual education programs on the elementary level, Spanish is used most of the time by the student when speaking with his or her mother. Spanish is least often used in stores. Please note that figure 3 reflects Spanish usage patterns of the sophomore student when interacting in specified situations, *not* usage patterns of the mother , father, etc. in speaking with the subject.

During the preschool years, these subjects spoke only Spanish in all situations. Now, as sophomores, they speak mostly Spanish with their mother and father and use Spanish about half the time or less when speaking with friends, at work, with other students and when in stores. We might note here that these students categorize their English proficiency between the levels "pretty well" and "very well" (mean= 6.7). From this we can extrapolate that the students *choose* to use English and Spanish in specific situations, for example, Spanish is used much more frequently with parents than in other situations. Most likely this is because Spanish is more readily understood by the parents. In such situations, usage of Spanish by the students is not an indication of low English proficiency.

For the students who spoke *Spanish as a first language and some English* before entering school (N=276), Spanish is most often used when speaking with the parents, although somewhat less frequently than was the case with the "Spanish-Only" students (see figure 3 (b)). Spanish is least often used in stores, at work, with other students and with friends. It should be noted that these students categorize their English proficiency near the category "very well" (mean= 5.6; 4= very well,... 16= not at all). Again, it appears that the subjects *choose* to use each language in particular circumstances and usage of Spanish is not an indication of low English proficiency but rather an affirmation of bilingual competence.

Shift in Spanish Usage



Shift for "Spanish Only" Students

Shift for "Spanish-English" Stude nts

FIGURE 3. *Spanish usage at two time points, preschool and sophomore year of high school.* The filled bar indicates Spanish usage at the preschool level.
Figure (a) shows the current Spanish usage pattern *by the student* for students who spoke *only Spanish* at the preschool stage.This graph shows the Spanish usage patterns when talking with the mother, father, friends, at work, with other students, and in stores.
Figure (b) shows the current Spanish usage for students who at the preschool stage spoke Spanish as a first language and some English.
A shift in language from Spanish to English can be seen in these graphs.

The following factors should be borne in mind to properly assess the results of this study:

1. Information about language proficiency and use is self-reported.

2. Only Mexican-American students who remained in school through their sophomore year are included in this analysis. Curiel and Richek (1985) affirm that bilingual education tends to lower dropout rates for Hispanic students. All students included in this study participated in bilingual educations programs.

3. A broad definition of bilingual education has been used in this study in order to preserve a large sample size and observe national trends. More rigorous subsets may be further analyzed to determine whether particular varieties of bilingual education programs are associated with different long-term language patterns. This may be accomplished by using hierarchical component analysis (Olson, 1989).

4. Cummins (1981) has argued strongly for the importance of a distinction between language which is essentially communicative and contextual and language which is less contextualized and primarily for academic use. This study does not clearly differentiate between academic language and non-academic language. Contrasting self-assessed English language proficiency with each student's objective English HS&B test score (variable LANGSD, composed of the mean of English reading and vocabulary scores) may help to clarify this point. Mean LANGSD is 43.3 for Spanish-only students (N=152, SD= 7.3); the mean is 43.6 (N=275, SD=7.1) for the Spanish-English students. This falls within the second quartile for the national sample of all students who took the English and mathematics portions of the HS&B standardized test (base year test composite, BYTEST variable) . For the entire sample of 30,000 sophomores, the BYTEST scores range from 27.58 to 74.24 (Jones, et. al., 1983) and the quartile cutting points are 42.53, 49.07, and 56.28.

Educational Importance

Sophomore Mexican-American students who spoke Spanish as a first language and were educated in diverse, elementary level bilingual education programs in the United States during the late 1960's and early 1970's report their current English proficiency to be on a high level (see figure 4 (a)). The entire group of students (N= 428) show a 6.0 mean in English proficiency on a composite scale where 4=very well... 16=not at all. The factors "understanding the language", "speaking", "reading" and "writing" were added to determine the composite score. There is a contrast between English proficiency scores and standardized HS&B vocabulary and reading test scores (LANGSD), however. The reason for this discrepancy needs to be investigated in further studies. The same students demonstrate a mean of 7.7 in Spanish proficiency (see figure 4 (b)). Spanish is most often used at home with the parents and English is most often used in community and academic settings.

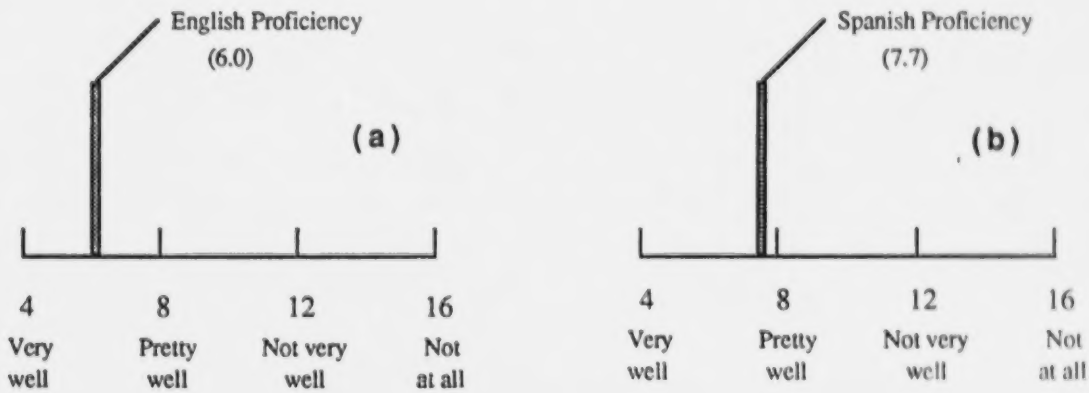


FIGURE 4 . *Language proficiencies of the total group of Mexican-American sophomores.*
(a) English proficiency, measured at the sophomore year of high school, for the total group of Mexican-Americans who spoke Spanish as a first language (N=428).
(b) Spanish proficiency, measured at the sophomore year, for the total group of Mexican-Americans who spoke Spanish as a first language (N=428).

REFERENCES

Andersson, T., & Boyer, M. (1978). Bilingual schooling in the United States (Second edition). Austin, TX: National Educational Laboratory Publishers, Inc.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framework. Los Angeles: National Dissemination and Assessment Center.

Curiel, H. (1979). A comparative study investigating achieved reading level, self-esteem and achieved grade point average given varying participation periods in a bilingual elementary program. Unpublished doctoral dissertation, Texas A & M University.

Curiel H., & Richek, H.G. (1985), Impact of early exposure to bilingual education as related to school grades, absenteeism, grade retentions and incidence of school drop-out: A ten-year study. Hispanic Journal of Behavioral Science.

Hakuta, K. (1985). Mirror of Language. New York: Basic Books, Inc., Publishers.

Heyns, B. & Hilton, T.L. (1982). The cognitive tests for high school and beyond: An assessment. Sociology of Education, 55, (April/July): 89-102.

Jones, C., Clark, M., Mooney G., McWilliams, H., Crawford, I., Stephenson, B., &Tourangeau, R. (1983). High school and beyond, 1980 sophomore cohort, first follow-up (1982), data file user's manual. Washington, D.C: National Opinion Research Center, National Center for Education Statistics.

Leyba, C.F. (1978). Longitudinal study, Title VII bilingual program, Santa Fe public schools, Santa Fe, New Mexico. Los Angeles, CA: National Dissemination and Assessment Center, California State University.

National Clearinghouse for Bilingual Education. 1985. Descriptive phase of a national longitudinal study released. FORUM 8, (3): 1-3).

National Opinion Research Center. High school and beyond: Information for users. Base year 1980. Report to the National Center for Education Statistics under contract #300-78-0208. Chicago: National Opinion Research Center, 1980a.

National Opinion Research Center. High school and beyond: Language file code book. Chicago: National Opinion Research Center, 1980b.

National Opinion Research Center. High school and beyond: School questionnaire code book, Version I. Chicago: National Opinion Research Center, 1981.

Nielsen, F., & Fernández, R.M. (1981). Hispanic students in American high schools: Background characteristics and achievement. (Contract Report No. NCES 82-219X). Washington, D.C.: National Center for Educational Statistics.

Nielsen , F., & Fernández, R.M. (1981) Achievement and Hispanic students in American high schools. Report to the National Center for Education Statistics under contract #300-78-0208. Chicago: National Opinion Research Center.

Olson, S. (1987). The long-term academic effects of bilingual education programs on a national sample of Mexican-American sophomores: A component analysis. Ed.D. dissertation, University of Houston.

Olson, S. (1989). Long-term effects of bilingual education on a national sample of Mexican-American sophomores: A component analysis. Paper presented at the American Educational Research Association national meeting, San Francisco, California.

Paulston, C.B. (1980). Bilingual education: Theories and issues. Rowley, MA: Newbury House Pub., Inc.

Peng, S. S., Fetters, W.B., & Kilstad, A.J. (1981). High school and beyond: A national longitudinal study for the 1980's. A capsule description of high school students. Washington, DC: National Center for Education Statistics.

Saldate, M. IV., Mishra, S. P., & Medina, M.J. (1985). Bilingual instruction and academic achievement: A longitudinal study. Journal of Instructional Psychology, 12, 24-31.

San Miguel, Jr., G. (1988) Bilingual education policy development: The Reagan years. NABE Journal, Winter, Vol 12 (2), 97-112.

Willig, A.C. (1985). A meta-analysis of selected studies on the effectiveness of bilingual education. Review of Educational Research, 55 (3), 269-317.

Youth Policy (June, 1983). Issue/Debate: Proposed fiscal 1984 reductions in bilingual education.

Acknowledgement: My sincere thanks to Dr. Dilip Kondepudi for invaluable discussions, statistical guidance and technical assistance.